# Science Flight Report Operation IceBridge Arctic 2012

Flight: Falcon 05

**Mission: Southern Interior (land ice)** 



# **Flight Report Summary**

Aircraft	Falcon (HU-25) N525			
Flight Number	Falcon 05			
Flight Log number	12F001			
Date	Wednesday, May 2, 2012 (Z)			
Purpose of Flight	Occupy ICESat lines south of Kangerlussuaq			
Take off time	1147 Zulu at Kangerlussuaq			
Landing time	1544 Zulu at Kangerlussuaq			
Flight Hours	4 hours			
Aircraft Status	Airworthy.			
Sensor Status	All installed sensors operational.			
Significant Issues	None.			
Accomplishments	Surveyed three ICESat lines, which will extend our knowledge of the ablation of southern Greenland in a data sparse region			
Geographic Keywords	Southern Greenland			
Satellite Tracks	none			
Repeat Mission	repeated ICESat lines.			

## **Science Data Report Summary**

Instrument	Data Volume			Instrument Issues
	Survey Area	Entire Flight		
LVIS	V	X	37 GB	None
LVIS cameras	$\overline{\checkmark}$	X	48 GB	None

#### Mission Report (Seelye Martin, Acting Project Manager)

This is a flight south of Kanger that surveyed three ICESat tracks. The total distance flown was 2,686 km; an estimate of area covered was 3,500 square km; the ICESat tracks were #174, #55, and #62. The coverage of the ICESat lines will extend our knowledge of regional ablation in a data poor region. The distances flown along ICESat tracks (excluding turns) was

track 174 = 414 km

track 55 = 659 km

track 62 = 693 km

sub-total =1,766 km

Total distance flown was 2,686 km. The sky was cloud-free, and was described as "clear as a bell" by laser operator Shane Wake. Preliminary examination of the camera and LVIS data shows that the instruments worked well.

### Individual instrument reports from experimenters on board the aircraft:

LVIS: The LVIS system worked well and collected data for all of the flight.

LVIS-cameras: worked well.

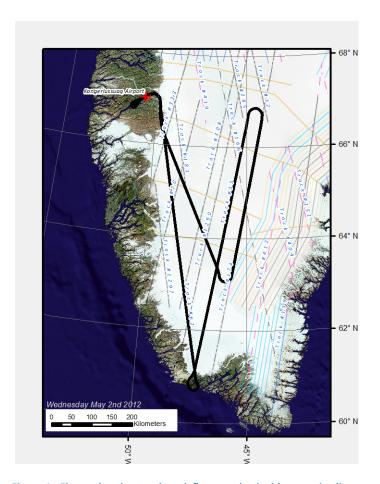


Figure 1: Figure showing total track flown and coincident sea ice lines.